



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: JUDY=1

In re Application of:	)	Art Unit: 3762
	)	
William JUDY	)	Examiner:
	)	
Appln. No.: 10/800,004	)	Washington, D.C.
	)	
Filed: March 15, 2004	)	July 19, 2004
	)	
For: DEVICE AND METHOD FOR	)	Confirmation No.: 6821
MEASURING CARDIAC FUNCTION)	)	
	)	

INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner of Patents and Trademarks  
Mail Stop MISSING PARTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir :

This Information Disclosure Statement is submitted in accordance with 37 CFR §§1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

[X] 1. This IDS should be considered, in accordance with 37 CFR §1.97, as it is filed before the mailing date of a first office action on the merits.

[X] 2. In accordance with 37 CFR §1.98, this IDS includes a list (e.g., form PTO/SB/08A) of all patents,

publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached.

[x] Documents AA-AR are U.S. patents and/or published applications. As this is a U.S. application filed after June 30, 2003, or an entry into national stage under 35 USC §371 after June 30, 2003, the requirement to file copies of such U.S. patents or published applications has been waived. (Office of Patent Legal Administration - Pre O.G. Notice of July 11, 2003).

[X] 3. Document AS is not in the English language. In accordance with §1.98(a)(3), Applicant states:

[X] An English translation of each document AS (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.

[X] 4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

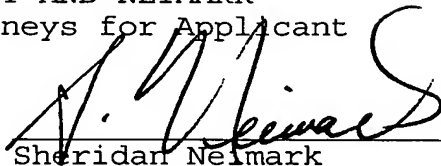
6. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserves the

right to prove that the date of publication is in fact different.

Respectfully submitted,

BROWDY AND NEIMARK  
Attorneys for Applicant

By:

A handwritten signature in dark ink, appearing to read 'S. Neimark', is written over a horizontal line.

Sheridan Neimark  
Reg. No. 20,520

624 Ninth Street, N.W., Suite 300  
Washington, D.C. 20001-5303  
Telephone: (202)628-5197  
Facsimile: (202)737-3528  
:jaa  
G:\BN\P\pola\JUDY1\pto\IDS 18J104.doc

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1

of 2

## **Complete if Known**

Application Number	10/800,004
Filing Date	March 15, 2004
First Named Inventor	William JUDY
Group Art Unit	—
Examiner Name	—
Attorney Docket Number	JUDY=1

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-3,340,867	September 12, 1967	KUBICEK et al.	
	AB	US-3,835,840	September 17, 1974	MOUNT	
	AC	US-4,326,539	April 27, 1982	OBERMAJER	
	AD	US-4,450,527	May 22, 1984	SRAMEK	
	AE	US-4,562,843	January 7, 1986	DJORDJEVICH et al.	
	AF	US-4,807,638	February 28, 1989	SRAMEK	
	AG	US-4,905,705	March 6, 1990	KIZAKEVICH et al.	
	AH	US-5,025,784	June 25, 1991	SHAO et al.	
	AI	US-5,109,863 A	May 5, 1992	SEMMLOW et al.	
	AJ	US-5,178,154 A	January 12, 1993	ACKMANN et al.	
	AK	US-5,309,917 A	May 10, 1994	WANG et al.	
	AL	US-5,423,326 A	June 13, 1995	WANG et al.	
	AM	US-5,433,073 A	August 22, 1995	WANG et al.	
	AN	US-5,578,291 A	November 26, 1996	PORTER	
	AO	US-5,617,869 A	April 8, 1997	AUSTIN et al.	
	AP	US-5,824,029 A	October 20, 1998	WEIJAND et al.	
	AQ	US-6,048,319 A	April 11, 2000	HUDGINS et al.	
	AR	US-Re. 30,101	September 25, 1979	KUBICEK et al.	

## **FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Number Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	AS	DE 2,620,285	09-15-1977	SIEMENS AG		
	AT	EP 0 575 984 A2	12-29-1993	N.I. MEDICAL LTD		
	AU	EP 0 666 468 B1	08-09-1995	KALINOSKI et al.		
	AV	WO 89/01312 A1	02-23-1989	BOMED MEDICAL MANUFACTURING, LTD		
	AW	WO 92/22239 A1	12-23-1992	FLORIDA ALT. UNIV. RESEARCH CORP.		
	AX	WO 97/11638 A2	04-03-1997	A.J. VAN LIEBERGEN HOLDING BV et al.		
	AY	WO 97/37591 A1	10-16-1997	RHEOGRAPHIC PTE LTD. et al		
	AZ	WO 98/23211 A1	04-06-1998	DIASONICS ISRAEL LTD.		
	BA	WO 98/53737 A1	12-03-1998	TSOGLIN et al.		

Examiner  
Signature

Date  
Considered

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/800,004
		Filing Date	March 15, 2004
		First Named Inventor	William JUDY
		Group Art Unit	--
		Examiner Name	--
Sheet 2	of 2	Attorney Docket Number	JUDY=1

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	BB	APPEL, Paul, et al, "Evaluation Of A Continuous, On-Line Real-Time Non-Invasive Cardiac Output And Ejection Fraction Measurement By Electrical Bioimpedance In Critically Ill Patients", <i>Critical Care Medicine</i> , (April 1987), Abstract.	
	BC	CAPAN, Levon, et al., "Measurement Of Ejection Fraction By Bioimpedance Method", <i>Critical Care Medicine</i> , (April 1987), Abstract.	
	BD	FEIGENBAUM, Harvey, "Basic Concepts of Stress Echocardiography", <i>Echocardiography</i> , (1994), Abstract and preface.	
	BE	GOOVAERTS et al, "High Frequency Impedance Cardiography", <i>IX International Conference on electrical bio-impedance</i> , Heidelberg, Germany Sept. 26-30, 1995; (September 1995), p.26-30	
	BF	JENSEN, L., et al, "Issues in Cardiovascular Care", <i>Heart &amp; Lung The Journal of Critical Care</i> , Vol. 24, No. 3, (May/June 1995); pp. 183-193.	
	BG	NAGEL, J.H., et al, "New Signal Processing Techniques for Improved Precision of Noninvasive Impedance Cardiography", <i>Annals of Biomedical Engineering</i> , Vol. 17, (1989); pp. 517-534.	
	BH	PATTERSON, R.P., et al., "Mapping The Cardiogenic Impedance Signal On The Thoracic Surface", <i>Medical &amp; Biological Engineering &amp; Computing</i> , (28, May 1990); pp. 212-216.	
	BI	RAAIJMAKERS, E., et al., "A Meta-Analysis Of Three Decades Of Validating Thoracic Impedance Cardiography", <i>Critical Care Med.</i> , (1999), Vol. 27, No. 6; pp. 1203-1213.	
	BJ	RAAIJMAKERS, E., et al., "The Inaccuracy of Kubicek's One-Cylinder Model in Thoracic Impedance Cardiography", <i>IEEE Transactions on biomedical Engineering</i> , vol. 44, no. 1, (January 1997); pp 70-76.	
	BK	RAAIJMAKERS, E., et al., "Thoracic Geometry And Its Relation To Electrical Current Distribution: Consequences For Electrode Placement In Electrical Impedance Cardiography", <i>Medical &amp; Biological Engineering &amp; Computing</i> , vol. 36, (September 1998); pp. 592-597.	
	BL	SAKAMOTO, K., et al., "Problems Of Impedance Cardiography", <i>Medical &amp; Biological Engineering &amp; Computing</i> , vol. 17, (November 1979); 697-709.	
	BM	SHOEMAKER, William, et al., "Multicomponent Noninvasive Physiologic Monitoring Of Circulatory Function", <i>Critical Care Medicine</i> , Vol. 16, No. 5, (May 1988); pp. 482-490.	
	BN	SPINALE et al., "Relationship Between Bioimpedance, Thermodilution And Ventriculographic Measurements In Experimental Congestive Heart Failure", <i>Cardiovascular Research</i> , vol. 24, (1990); pp. 423-429.	
	BO	WEISSLER, Arnold, "Medical Intelligence", <i>The New England Journal of Medicine</i> , Vol. 296, No. 6, (February 10, 1977); pp. 321-324.	

Examiner Signature[		Date Considered	
---------------------	--	-----------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.